

Urethane Grout Technical Data Sheet

DESCRIPTION

Mixed, Urethane Grout is a patented, water-based, grout offering the ultimate in color accuracy, water resistance, and stain and crack protection. This breakthrough formulation installs up to 50% faster than traditional grouts, and never needs to be sealed. Its perfect balance of flexibility and toughness enables it to exhibit unmatched performance. QuartzLock2™ RapidCure™ is approved for intermittent water exposure after only 3 days of cure and full water submersion after 7 days of cure (see typical working properties chart for details).

Bostik QuartzLock2™ RapidCure™ Premium, Pre-

Unlike other grouts that contain loose color pigments which can cause staining or be washed away during the installation process, QuartzLock2™ RapidCure™ quartz aggregate is color coated to ensure perfect color consistency every time. QuartzLock2™ RapidCure™ contains Bostik's Blockade® antimicrobial protection, which inhibits the growth of bacteria, mold, or mildew on the surface of the dried grout and enables it to resist stains caused by mold.

Suitable applications include interior and exterior, residential and commercial installations with ceramic, porcelain, glass, metal and natural stone tiles on floors and walls in dry to intermittent wet or submerged applications. It can be used in horizontal (floor) grout joint widths from 1/16" to 1/2" and vertical (wall) grout joints from 1/16" to 1/4".

QuartzLock2™ RapidCure™ is a technology engineered to appeal to today's green conscious marketplace, especially those seeking to obtain U.S. Green Building Council LEED® certification for their projects. Its unique combination of features and benefits produces one-of-a-kind specification potential for architects and designers.

QuartzLock2™ RapidCure™ is a revolutionary new technology which employs state-of-the-art urethane chemistry. As yet, there is no current ANSI or ASTM standard for this technology (ANSI 118.3 pertains only to epoxy grout products); however, for comparative purposes, physical and chemical properties are listed on previous page. QuartzLock2™ RapidCure™ is designed to have the perfect balance of physical properties in order to provide flexibility, strength and adhesion, making urethane grouts an excellent choice for a wide variety of applications.

QuartzLock2™ RapidCure™ grout can also be used for grouting of luxury vinyl tile. See vinyl tile manufacturer's instructions regarding compatability and installation details.

PRODUCT BENEFITS

- · Premixed, for fast, easy installation
- 3 day intermittent water exposure
- · Submerged applications
- No powdered pigment additives*

- No color fading, streaking or shading even when wet!
- Does not contribute to efflorescence
- · No sealing required ever!
- · Chemical and stain resistant
- Re-usable (when stored properly in original container)
- UV stable colors will not yellow, darken or fade
- Easy water clean up
- · Non-sag formula ideal for vertical surfaces
- May contribute to USGBC LEED® Credits: MR 4.1 & 4.2 (Recycled Content) and EQ.4.1 (Low-Emitting Materials)
 * White contains some loose pigment

DIRECTIONS FOR USE

Read and understand this technical data sheet and associated material safety data sheet completely before beginning. Always use protective clothing (gloves and eye protection) when working with grout. When installing your tile, follow applicable ANSI, TCNA and NTCA installation standards.

PRIOR TO GROUTING FULL INSTALLATION, APPLY TO A TEST AREA TO BECOME FAMILIAR WITH APPLICATION AND TO ENSURE PRODUCT SATISFACTION.

SURFACE PREPARATION

- 1. Ensure tile is firmly set and mortar is completely dry. Wait at least 24 hours after setting tile before grouting with QuartzLock2™ RapidCure™. Always follow tile manufacturer's instructions before grouting.
- 2. Remove all spacers, water, debris and adhesive from tile joints. For best results, surface of tile should be at room temperature (70°F/21°C to 75°F/24°C). Urethane materials are affected by temperature and humidity variations. Cool temperatures and/or high humidity will slow cure time.

TYPICAL PHYSICAL PROPERTIES				
Description	Results			
Water Cleanability (per ANSI 118.3)	Pass			
Density	13.8 lbs/gal			
Vertical Joint Sag (per ANSI 118.3)	Pass			
Installation Temperature Range	40°F - 100°F (4°C - 38°C)			
Shelf Life	2 years (in original unopened container)			
Water Absorption	<1%			
Compressive Strength	>3,500 psi*			
Tensile Strength	510 psi			
VOC Content	35 g/L (as calculated by SCAQMD Rule #1168)			
Recycled Content	8% pre-consumer recycled glass			
*Test results were performed in an actual grout joint.				

- 3. To facilitate cleaning, pre-seal all porous tile and natural stone with a water-based sealer before grouting; ensure that sides of tiles are sealed as well. The use of a water-based sealer may also be advantageous for certain types of porcelain tile including through body and polished porcelain, frosted glass and/or textured surface tiles. For glass, metal, polished marble, stone and other soft surfaces, test grout on a small area to ensure compatibility and scratch-free application. Make sure tile and grout joints are clean and free from solvents/residues before grouting.
- 4. Prior to re-grouting existing grout joints, completely remove all old grout and any surface contaminants. Rinse any residual material out of grout joints, then allow joints to completely dry before re-grouting.

MIXING

- 1. DO NOT add water, or any other materials to QuartzLock2™ RapidCure™! This will cause grout failure and void all warranties.
- Upon opening container, a translucent, milky liquid may be present on the surface. This is from normal settling during shipment.
- 3. Mix grout in pail (approximately 1 minute) by hand with a margin trowel and bring to a uniform mixture. A drill mixer is not recommended as it will introduce excessive air and cause grout sagging on vertical applications, a reduction of color uniformity, and/or other performance issues such as pinholes.
- 4. Continue to remix grout with margin trowel throughout the grouting process to ensure proper resin dispersion.

INSTALLATION

- 1. Spread grout over the face of tile using a sharp-edged, firm (epoxy/urethane) grout float. Grout small areas at a time. For best results clean-up as you finish each area. Work grout back and forth at a 45° angle to the face of the tile to ensure grout joints are fully packed, especially in tight and irregular joints. Failure to fully pack joints may compromise structural integrity.
- 2. Spread grout within a reachable (arm's length) area. Then clean-up QuartzLock 2^{TM} RapidCure $^{\text{TM}}$ (see below) within this same area before moving on to another section.
- 3. Remove all excess grout by holding rubber float at a 90° angle, working diagonally across face of the tile to prevent grout removal from joints.

WORKING TIME

Warm and dry conditions reduce working time, while cold and humid conditions extend it. QuartzLock 2^{TM} RapidCureTM liquid urethane binder should be wet in appearance. Do not install grout if the liquid urethane binder has skinned over or appears dry.

CLEAN-UP

 Remove grout residue and haze as you work, particularly in warm or dry climates. If working alone, only grout as far as you can reach (arm's

TYPICAL WORKING PROPERTIES				
Description	Time			
Working Time	3 hours			
Tack-Free Time	8 hours			
Ready for Light Foot Traffic	24 hours			
Ready for Heavy Foot Traffic	3 days			
Stain Resistant (Food, Beverages, etc.)	3 days			
Cure Time Before Intermittent Water Exposure (>70°F/21°C and <50% RH)	3 days			
Cure time before use in submerged installations**	7 days			

^{**}Contact Bostik Tecnical Services to determine suitability for grouting any tile or stone that is to be submerged.

CHEMICAL RESISTANCE PROPERTIES (PER ASTM C267)				
Chemical Resistance	Typically Found In	Results		
Acetic Acid (3%)	Vinegar	Pass		
Ammonium Chloride	Shampoo	Pass		
Citric Acid Solution (100 g/L)	Household Cleaners	Pass		
Lactic Acid	Milk	Pass		
Phosphoric Acid (10%)	Household Cleaners	Pass		
Sulfamic Acid (10%)	Cleaning Agents	Pass		
Sodium Hypochlorite (1:1) 3%	Bleach, Household Chemicals, Disinfec- tants	Pass		
Hydrochloric Acid (10%)	Muriatic Acid	Pass		

Results shown are typical and reflect test procedures used by the Tile Council of North America (TCNA).

length) before initial cleaning. If working as a team, one person should grout, with the other(s) cleaning immediately behind the first person. Clean/rinse sponge in water and wring nearly dry. For best results use an alcohol based cleaner such as Windex® or methylated spirits. Apply to clean, white microfiber rag and wipe. Use sparingly. Do not pour cleaner directly onto floor.

- During installation, urethane grout requires very little water to clean; using too much water during cleanup will dilute the urethane binder and cause curing issues.
- 3. Clean tile surface with a flat sponge, being careful to remove all excess grout and haze. Wipe up spilled water immediately; do not allow water to sit on grout surface or in ungrouted joints. Excessive water used during clean-up can dilute the urethane binder and cause curing issues that may lead to grout failure. Change water after each 100 square feet, for each new bucket of grout, or when water is dirty or milky in appearance. Check work as you clean. Repair any low spots with additional grout. **DO NOT** over wash grout joints.

CURE TIME & PROTECTION

With immediate cleaning and proper maintenance, QuartzLock2TM RapidCureTM is resistant to staining when exposed to most common household goods and cleaning agents. Long-term exposure to any material increases the potential for staining.

- 1. Humidity affects the rate at which QuartzLock2™ RapidCure™ cures more than temperature. The lower the humidity, the faster the cure.
- Under normal conditions, light foot traffic is acceptable after 24 hours; heavy foot traffic after 72 hours.
- 3. Let cure at least 72 hours before exposure to food stains.
- 4. For ANY area that will later receive intermittent water exposure, allow area to cure 3 days.
- 5. For any area that is to be submerged in water, allow to cure for 7 days. However, contact Bostik Technical Service 1-800-726-7845 beforehand. Failure to do so will invalidate warranty.
- 6. Wait 7 days before exposing grouted area to household cleaners (see Chemical Resistance Properties Table).
- Outdoor installations must be protected for 3 days by tenting the grouted area (at least one foot above the surface).
- 8. Protect grout from stains and chemicals while curing.

SECONDARY HAZE REMOVAL (if necessary)

Allow cleaned tiles to dry, then inspect the surface. If additional haze removal is necessary, use an alcoholbased cleaner such as a glass cleaner (for luxury vinyl tile, test first on a separate piece for compatibility). If additional haze removal is necessary use Bostik Blaze™ Urethane Grout Haze Cleaner, or Texspar Plus™. Wait 3 hours in low humidity/warm temperature (<50% RH and >70°F/21°C) environments and 6 hours in high humidity / cool temperature (>50%RH and <70°F/ 21°C) environments before using Blaze™. Make sure the grout is sufficiently cured to withstand light finger pressure without losing form. Spray Bostik Blaze™ on a nylon scrub pad designed for delicate surfaces such as the 3M™ Doodlebug™ white cleaning pad. Rub the cleaning pad lightly over the urethane haze on the tile being careful not to touch the grout joints. Excessive haze may require direct spray on surface, more dwell time or repeated cleaning. Do not flood the surface with cleaner. Allow Bostik Blaze™ to rest on the tile/stone surface for at least 60 seconds to ensure sufficient penetration. Use a damp sponge and clean water to remove the film and cleaner. Finish by drying the tile surface with a clean towel or cloth. Contact Bostik Technical Service if a persistent haze exists.

MAINTENANCE CLEANING

For longer term cleaning of cured grout joints, use neutral pH and/or mildly abrasive everday household cleaners such as Soft Scrub® with Bleach. Do not use undiluted bleach or other harsh cleaners.

18 LB. UNIT COVERAGE CHART (FT²)						
Tile Size	¹ / ₁₆ "	1/8"	³ / ₁₆ "	1/4"	3/8"	1/2"
1" x 1" x ½"	63	32	-	-	-	-
2" x 2" x ¾"	126	63	-	-	-	-
3" x 6" x 5/11	402	206	140	108	-	-
4" x 4" x 5/16"	382	196	134	102	-	-
41/411 x 41/411 x 5/1611	214	107	71	54	36	27
4" x 8" x ½"	168	84	56	42	28	21
6" x 6" x ½"	189	95	63	47	32	24
8" x 8" x 3/8"	337	168	112	84	56	42
12" x 12" x ¾"	505	253	168	126	84	63
13" x 13" x ¾"	547	274	182	137	91	68
16" x 16" x ¾"	673	337	224	168	112	84
18" x 18" x ¾"	758	379	253	189	126	95
24" x 24" x ¾"	1010	505	337	253	168	126

9 LB. UNIT COVERAGE CHART (FT²)						
Tile Size	1/16"	1/8"	3/16"	1/4"	3/8"	1/2"
1" x 1" x ½"	32	16	-	-	-	-
2" x 2" x ½"	63	32	-	-	-	-
3" x 6" x ¾"	201	103	70	54	-	-
4" x 4" x 5/4"	191	98	67	51	-	-
4½" x 4½" x 5½"	107	54	36	27	18	13
4" x 8" x ½"	84	42	28	21	14	11
6" x 6" x ½"	95	47	32	24	16	12
8" x 8" x ¾"	168	84	56	42	28	21
12" x 12" x ¾"	253	126	84	63	42	32
13" x 13" x ¾"	274	137	91	68	46	34
16" x 16" x ¾"	337	168	112	84	56	42
18" x 18" x ¾"	379	189	126	95	63	47
24" x 24" x ¾"	505	253	168	126	84	63

Average coverage per container – coverage will vary based on tile size, joint width and depth.

LIMITATIONS

- Follow manufacturer's instructions for setting materials, waterproofing, anti-fracture membranes, etc., used on the job.
- Minimum recommended grout joint width is 1/16" for floors and walls.
- Maximum recommended grout joint width is 1/2" for floors and 1/4" for walls.
- · Do not use as a setting mortar.
- Not for use in heavy commercial or heavy industrial applications (i.e., chemical plants, commercial kitchens, shipping/receiving, service areas, dairies, breweries, meat packing houses, etc.), or in areas subjected to harsh or persistent chemicals or enzymatic cleaners, or areas exposed to aggressive cleaning routines such as pressure washing or steam cleaning.
- Not a replacement for a waterproofing membrane.
 When a waterproofing system is required under ceramic tile or stone, consult Bostik Technical Service.
- Do not use on slabs with high moisture emission rates.
- Protect grout from stains and chemicals during the cure process.
- Do not grout when tile surface is above 100°F/38° C.
- Do not use vinegar or acid solutions for clean up during installation process (see Chemical Resistance Properties Table).
- Do not use for commercial re-grouting or wet environment re-grouting installations, including showers, steam showers, and outdoor applications.
- · Not for use in hot tubs or steam showers.
- Use care when grouting glass, metal or polished surfaces to avoid scratching. Test on a small area first.
- Use of a sealer before grouting is always recommended on polished marble, stone, slate and other natural, porous tiles.
- Use an approved waterproofing membrane on top of mud bed installations before installing tile or stone. Follow manufacturers' recommendations for all waterproofing materials. For liquid applied waterproofing materials, apply to within 1" of any drains to prevent weep hole blockage.
- Use of enzymatic floor cleaners will void all warranties.
- Caulk all corners (floor/wall change of plane) with an appropriate caulk after grout has cured, such as Bostik Tub and Tile Caulk™.
- Long-term exposure to any substance increases the potential for staining.

STORAGE AND SHELF LIFE

- 1. QuartzLock2[™] RapidCure[™] can be used for a period of up to two (2) years from date of manufacturer if stored in original unopened container at temperatures above 32°F (0°C).
- 2. After opening, QuartzLock2™ RapidCure™ can be saved for reuse if properly resealed in original container (always wipe the pail lip clean prior to resealing to ensure proper seal is achieved with the vapor lock lid).

3. Do not freeze.

PACKAGING

Available in 9 Lb and 18 Lb pails.

WARNING

IRRITANT. May irritate eyes, skin and respiratory tract. Do not get into eyes, on skin or on clothing. Do not breathe fumes. Use with adequate ventilation. Wash thoroughly after handling. Store container in a cool, dry area with lid tightly sealed. Do not reuse container.

FIRST AID

In case of contact with eyes or on skin, rinse with water for at least 15 minutes. If swallowed, call a Poison Control Center or doctor immediately. Do not induce vomiting.

FIRE

Dry chemical, foam, carbon dioxide or water.

KEEP OUT OF THE REACH OF CHILDREN.

LIMITED WARRANTY

Limited Warranty found at www.bostik-us.com or call 800.726.7845. TO THE MAXIMUM EXTENT ALLOWED BY LAW, BOSTIK DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES. INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. UNLESS OTHERWISE STATED IN THE LIMITED WARRANTY, THE SOLE REMEDY FOR BREACH OF WARRANTY IS REPLACEMENT OF THE PRODUCT OR REFUND OF THE BUYER'S PURCHASE PRICE. BOSTIK DISCLAIMS ANY LIABILITY FOR DIRECT, INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES TO THE MAXIMUM EXTENT ALLOWED BY LAW. DISCLAIMERS OF IMPLIED WARRANTIES MAY NOT BE APPLICABLE TO CERTAIN CLASSES OF BUYERS AND SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. It is the buyer's obligation to test the suitability of the product for an intended use prior to using it. The Limited Warranty extends only to the original purchaser and is not transferable or assignable. Any claim for a defective product must be filed within 30 days of discovery of a problem, and must be submitted with written proof of purchase.